# Merritt Island Launch Area (MILA) and Ponce De Leon (PDL) Commercialization Effort

# Presented to the Network Support Group (NSG)

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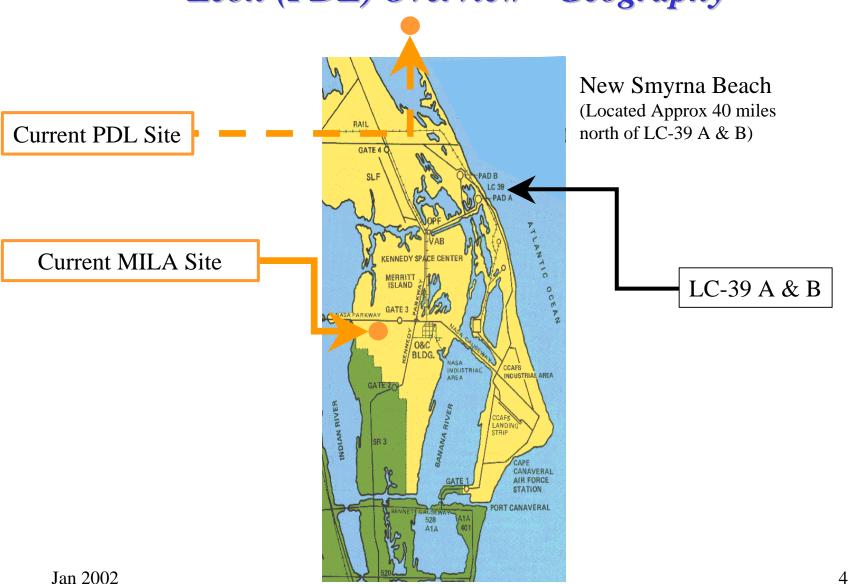
## Commercialization Vision and Definition

- Space Communications and Data Systems Office (SCDS) commercialization vision, is to acquire its space communications goods and services from the private sector" to the maximum extent practical.
- SCDS defines commercialization as purchases by NASA of goods and services from an industry that owns its own assets used in production and performance and that has customers in addition to NASA.

### Implementing the Commercialization Plan

- Buy Wide Area Network (WAN) services from commercial service providers
- Buy Ground Network (GN) services from commercial services providers
- Sell available capacity on the Space Network (SN) as appropriate
- Sell available capacity on other assets as appropriate
- Lockheed Martin/CSOC to sell available capacity to commercial firms including ELV customers
- Foster the emergence of commercial Space Network services by investing in enabling technologies
- Meeting customer needs for prompt, flexible service

# Merritt Island Launch Area (MILA) and Ponce De Leon (PDL) Overview - Geography



# Overview - MILA Tracking Station



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# Overview - PDL Tracking Station



# Overview - Facility Characteristics

- Ownership
  - Government owned (MILA on KSC property, PDL on USCG property)
- Functions provided
  - Communications with space shuttle, other NASA spacecraft, and non-nasa spacecraft launched from the eastern range
  - Test and checkout of spacecraft communications links during pre-launch processing
  - Continuous communication with the space shuttle during critical liftoff and launch ascent periods
  - Orbital and shuttle landing support

#### History

- CSOC "Buy" Procurement for MIL/PDL replacement initiated in April 2001
- Task order released in June 2001
  - Two bidders: HTSI and USN/USA
  - NASA surveillance of technical and pricing proposals
- Parallel "Make" proposal worked by Lockheed Martin
  - Technical proposal Not presented to NASA for review

#### Decisions

- CSOC advises NASA on Oct 24, 2001 that both "Buy" and "Make" proposals are not feasible
- NASA HQ/M3 Office of Space Communications requests a NASA team develop options for consideration.

- 1. Refurbishment of critical MIL 9M system components... (Keeps the train on the track while other options are pursued)
  - a. Tony Ippolito/MIL to follow up with DLM team (currently on-site) for an assessment of recommended critical antenna work and to follow up with Ed Richards/CSOC on other systems (receivers) needing immediate attention.
  - b. Steve Currier/WPS to follow up with Phil Johnson (or his rep) on specifics currently included in the CSOC NME plan. The question is: What does the \$6M in FY-03 cover? Is it the transition from hydraulic drives to Electric Drives?
- 2. Further Reduction of MIL infrastructure and current staffing level:
  - a. Tony Ippolito/MIL to review CSOC recommendations associated with buildings, Maintenance and security. Intent is to identify risk that goes with reductions in recurring cost.
    - b. Steve Currier identify automation tasks that would result in staff reduction

- 3. Establish/Renew Interface with U.S. Air Force 45th Space Wing for TEL-4 operations: (Co-locate at TEL-4 or at MILA)
  - a. Gary Morse/JSC to contact Stan Newberry at US SPACECOMMAND to ensure management loop is closed.
  - b. Tony Ippolitto/MIL to interface with 45th Space Wing (Once the management loop is closed) to determine what the TEL-4 Range Automation (2nd phase) schedule is.
  - c. Ted Sobchak/GSFC to explore SSP landing support requirements with JSC/MOD Ascent/Entry Flight techniques panel (AEFTP). Consider using TDRS for terminal landing phase + a runway capability to relay post landing real-time data/FM dumps to KSC/CD&SC. UHF, PPOV video and ranging requirements will require solutions.
  - d. Steve Currier/WPS Establish a framework for any agreements necessary between NASA/GSFC, KSC, 45<sup>th</sup> Space Wing and MIL.

- 4. NASA or CSOC pursue a new site location that meets existing or modified support requirements
  - a. Ted Sobchak/GSFC same as 3c above.
  - b. Steve Currier/Ted Sobchak to determine if 5m or 7m systems would be appropriate and at what cost.
- 5. CSOC modify existing solicitation package to a "Cost Plus" with initial development investment from bidders.
  - Issue new RFP.
  - This was the CSOC recommendation following the rejection of Buy and Make proposals.

- Programmatic Considerations:
  - What is our vision of MILA's role?
    - -Space Shuttle only unless we commercialize or assume USAF/TEL-4 tracking responsibilities.
  - Add MIL/PDL to the Space Shuttle Program Privatization effort?
    - -Benefits unknown
  - Transfer Enterprise responsibility to Code M
    - -Advocacy
    - -Potential funding help from SSP